

REMARKS

Applicants thank the Examiner and the Examiner's supervisor for the courtesy extended to Applicants' attorney during the interview held February 6, 2007, in the above-identified application. During the interview, Applicants' attorney explained the presently-claimed invention and why it is patentable over the applied prior art, and discussed other issues raised in the Office Action. The discussion is summarized and expanded upon below.

The rejection of Claims 1-3 and 6 under 35 U.S.C. § 103(a) as unpatentable over EP1 153 595 (Shiroyama et al), is respectfully traversed.

The present invention is drawn to an O/W emulsion drawn to an O/W emulsion **semitransparent** cosmetic. As defined in the specification herein at page 5, lines 12-15, the above-emphasized term refers to light transmissivity in a range of 2-45%, measured under particular conditions. While the Examiner's supervisor, during the above-referenced interview, suggested that the above-emphasized term is a relative term unless defined by the claim, Applicants' response, as Applicants' attorney pointed out during the above-referenced interview, is that an Applicant is entitled to be his own lexicographer. See MPEP 2111.01 IV, and cases cited therein. Thus, the above-emphasized term necessarily has the meaning prescribed for it in the specification, as discussed above. It is not necessary to physically incorporate the definition in the claim.

Shiroyama et al, on the other hand, is drawn to **clear** compositions, i.e., transparent compositions, as described in the specification herein at the paragraph bridging pages 1 and 2, which refers to the Japanese equivalent of Shiroyama et al, i.e., JP 2001-316217. As Applicants describe, in order to ensure transparent solubilization of ceramide, a large amount of a surfactant is required, which impairs safety and feeling during use. If the amount of surfactant is decreased in order to obtain an excellent feeling during use, the ceramide does not solubilize transparently, resulting in a cloudy or semitransparent emulsion in many cases.

In these cases, separation and creaming occur over time and it is difficult to obtain adequate long-term stability.

By the present invention, Applicants have been able to obtain a semitransparent emulsion with excellent long-term stability. As recited in Claim 1, the present invention is an O/W emulsion semitransparent cosmetic comprising the following components (a)-(d):

- (a) a ceramide,
- (b) an oil component containing a sterol and an isostearic acid,
- (c) a nonionic surfactant, and
- (d) water,

with a mean particle diameter of 100-300 nm.

As Applicants' attorney noted during the interview, the issue is not whether one skilled in the art, given the motivation to convert the clear or transparent composition of Shiroyama et al, would know how to do so. Rather, the issue is whether such motivation exists in the first instance. Without the present disclosure as a guide, there would have been no motivation to convert the clear or transparent composition of Shiroyama et al to a semi-transparent composition.

Applicants describe comparative data in the specification demonstrating the separate patentability of claims containing the mass ratio limitation of Claims 3 and 13, claims containing the nonionic surfactant amount limitation of Claims 14 and 15, and claims containing both limitations (Claims 16 and 17). The data demonstrate the significance of the mass ratio limitation, and how changing the relative amounts of nonionic surfactant compared to the total amount of ceramide and oil component affects the emulsion mean particle diameter, semitransparency, and long-term stability. The data deemed relevant to the present ground of rejection are for Examples 2-4 and 6-8, and Comparative Example 1, which data (together with data for Examples 1 and 5, and Comparative Examples 2 and 3) are

shown in Table 1 at page 8 of the specification. Table 1, limited to Examples 2-4 and 6-8, and Comparative Example 1, is reproduced on the following page.

Table 1

(%)

Component		Example								Comparative Example
(1)	Ceramide 2	2	3	4	6	7	8		1	
(2)	Isostearic acid	0.5	0.5	0.5	0.025	2.5	0.5		0.5	
(3)	Cholesterol	0.8	1	1.5	0.02	2	1.4		1	
(4)	Polyoxyethylene (60) hydrogenated castor oil	0.2	0.5	0.5	0.005	0.5	0.1		-	
(5)	Sodium polyoxyethylene lauryl ether phosphate	1	1	1	0.025	2.5	1		3	
(6)	Glycerin	-	-	-	-	-	-		-	
(7)	Diglycerin	-	-	-	1	-	1		-	
(8)	Alcohol	7	7	7	5	5	5		7	
(9)	1,3-Butylene glycol	10	10	10	10	10	10		10	
(10)	Carboxy vinyl polymer	-	-	-	0.1	-	-		-	
(11)	Sodium hydroxide	-	-	-	0.03	-	-		-	
(12)	Xanthan gum	-	-	-	-	0.1	-		-	
(13)	Native gellan gum	-	-	-	-	-	0.05		-	
(14)	Purified water	Balance	Balance	Balance	Balance	Balance	Balance		Balance	
Mass ratio of components (a) and (b) / component (c) $[(1)+(2)+(3)) / [(4)]]$		1.5	2	2.5	2	2	2		0.5	
Evaluation item										
Evaluation result										
(i)	Emulsion mean particle diameter (nm)	156	210	250	205	190	202		32	
(ii)	Semitransparency (600 nm transmissivity (%))	25 (*2)	5 (*2)	4 (*2)	6 (*2)	2 (*2)	6 (*2)		60 (*3)	
(iii)	Long-term stability	●	●	●	●	●	●		×	

(\*1) Opaque

(\*2) Semitransparent

(\*3) Transparent

Shiroyama et al discloses a clear, as discussed above, aqueous ceramide composition containing 1.0 to 5.0 wt % of a ceramide, long chain fatty acid, nonionic surfactant, and water as required components, and optionally various components such as sterols [0013].

Clearness, i.e., transparency, is one of Shiroyama et al's primary objectives [0006]- [0009].

As discussed above, Shiroyama et al provides no motivation to one of ordinary skill in the art to make a **semitransparent** cosmetic. It follows that Shiroyama et al does not disclose any parameters by which one skilled in the art could make a semitransparent cosmetic having the long-term stability achieved by the present invention. Of all the examples disclosed by Shiroyama et al, it is respectfully submitted that Examples 5-8 represent the closest prior art, since they contain the presently-required components, albeit in amounts outside the terms of the present claims. In these examples, the mass ratio of (ceramide and isostearic acid and cholesterol):nonionic surfactant ranges from 0.4:1 to 1:1, and is thus outside the terms of the present claims, which require a corresponding ratio of 3:1 to 1.2:1. In addition, each of these examples requires an amount of nonionic surfactant of at least 5% by weight. As Shiroyama et al discloses the appearance of these examples as "A", which is defined therein as "Clear" [0045], it must be assumed that the resulting emulsion particles have a mean diameter below that required by the present claims. Compare to Comparative Example 1 herein, wherein the above-discussed ratio is 0.5, the emulsion mean particle diameter is 32nm, and the emulsion is transparent, although long-term stability is poor.

For all the above reasons, it is respectfully requested that this rejection be withdrawn.

The Examiner is respectfully requested to contact the undersigned attorney by telephone if it would advance the present application to issue.

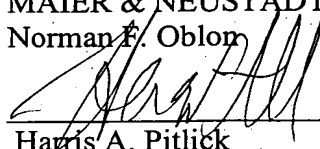
Application No. 10/534,986  
Reply to Office Action of November 3, 2006

All of the presently-pending claims in this application are now believed to be in immediate condition for allowance. Accordingly, the Examiner is respectfully requested to pass this application to issue.

Respectfully submitted,

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